

## **RESPONSE TO COMMENTS**

**Response to Alabama Department of Environmental Management Comments  
Draft Site Investigation Report, Former Range 43, Parcel 97Q, Range, Choccolocco  
Corridor, Parcel 144Q-X, and Impact Area, Choccolocco Corridor, Parcel 147Q-X  
Fort McClellan, Calhoun County, Alabama**

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*Comments from Stephen A. Cobb, Chief, Governmental Hazardous Waste Branch, Land Division, dated January 9, 2004.*

**Comment 1:** Throughout the document, figures illustrating analytical results indicate up to eight significant digits for the SSSL values making it difficult to read and compare. The number of significant figures should be consistent.

**Response 1:** Agree. The figures were revised accordingly.

**Comment 2:** Figure 3-1: This figure illustrates sampling locations for groundwater, surface soil, subsurface soil, and depositional soil samples taken during the site investigation. One sampling location (HR-147Q-MW02) was noted in Table 3-1 as being the only groundwater, surface soil, and subsurface soil sampling location. According to Figure 3-1, HR-147Q-MW02 is correctly identified, but HR-144Q-MW01 and HR-147Q-MW01 are identified similarly. Please revise the figure to identify these two sampling locations as subsurface and surface soil locations only, no groundwater locations.

**Response 2:** Agree. Figure 3-1 was revised per comment.

**Comment 3:** Figure 5-2: On this figure, sample location HR-144-DEP04 illustrates lead and selenium concentrations above their respective ecological screening values (ESVs) and background values. Depositional soils downgradient of this site could also be impacted by these metals. ADEM and EPA recommend that the potential for off-site migration of these metals be examined during the RI phase of work.

**Response 3:** Comment noted.

**Comment 4:** Figure 5-2: On this figure, sample location HR-144-GP04 illustrates nine metals which exceed their respective ESVs and background values. According to the figure, this sampling location is off-site. Due to the metals present and their concentrations, the potential contamination has not been fully delineated. ADEM and EPA recommend that this are be further addressed during the RI phase of work.

**Response 4:** Comment noted.

**Comment 5:** Appendix A: The reason for using chain of custody (COC) forms is the ability to reconstruct the custody of the samples from time of collection until

time of receipt by the analytical laboratory. Signatures must be present at the appropriate location on the appropriate forms. The sampling records in this appendix will not allow for the reconstruction of the COC for the following reasons:

- On all but one sample collection log (SCL), the sampling team members printed, but did not sign, their names.
- On the remaining SCL, the sample team members were not identified.
- The name of the person who signed the "Relinquished By" block on all of the COC forms does not appear on the SCLs.
- On one of the COC forms, the "Relinquished By" block contains a printed name, not a signature.
- On four of the COC forms, both the "Relinquished By" and "Received By" blocks contain printed names, not signatures.

**Response 5:** Disagree. The main thrust of the reviewer's comment regards chain of custody yet the first two bullets above address irregularities with the sample collection logs (SCL). Chain of custody is documented on the COC form as noted by the reviewer in the comment. While Shaw agrees that the SCLs should have been thoroughly completed as a matter of course, the irregularities therein do not invalidate the chain of custody because that is not their purpose.

With regard to the third bullet, Shaw followed the procedures outlined in Section 6.1.7.1 *Field Custody Procedures* presented in the *Draft Installation-Wide Sampling and Analysis Plan*, Revision 3, February 2002 (SAP). This section states, "The sampling team, sample coordinator, and site manager will maintain overall responsibility for the care and custody of the samples until they are transferred or properly dispatched to the on-site screening facility and/or fixed-based laboratory." In addition, SAP Section 6.1.7.2 *Transfer of Custody and Shipment* states, "General custody of the sample will be maintained by the sample collection team members from the time of collection in the field through preparation and shipment to the laboratory. The main custody transfer will occur when the sample shipment is received into the laboratory from the field and is documented." Similar language is also provided in the QAP.

Using these two sections as guidance, all Shaw field personnel who are responsible for the collection of field samples (which includes the sample coordinator and the site manager) were considered part of the "sample team." No custody transfer record was considered necessary among members of the *same* sample collection team. If another contractor, a subcontractor to Shaw, the Army, or other personnel had collected samples and transferred them to Shaw for processing or analysis, then the transfer of custody of those samples would have been formally recorded using a COC form.

Multiple sample technicians were responsible for collecting samples and completing the sample collection logs. The samples and logs were funneled to the Shaw sample coordinator, who then reviewed the documentation, inventoried all of the samples collected, and compiled a single COC record to list all the samples collected (daily) for transfer to the receiving analytical laboratories. Therefore, the sample coordinator's signature on the form represents the transfer of custody from the Shaw sample team in the field to the analytical laboratory personnel (per Section 6.1.7.2 of the SAP). Shaw believes that this is satisfactory custody transfer documentation and, therefore, does not agree this indicates that sample custody was not maintained as stated in the comment. Shaw personnel followed the same chain-of-custody procedures that have been in effect since the beginning of the FTMC project in 1998. It is perplexing that until now these issues have never been called into question.

However, in light of recent comments received by ADEM and EPA, Shaw has changed its COC procedures to include a separate COC for each sample collection team. Each sample collection team will submit samples, COCs, and SCLs to the sample coordinator. The SCLs and COCs will be reviewed by the sample coordinator prior to taking possession of the samples and signing the COC. This process will be repeated for each sample collection team in the field. The COCs will then be copied for the field records and maintained onsite. The original forms will be transmitted to the office for filing in the project central files. In future reports, this appendix will include all "supplementary" sample team COCs to document intra-team custody transfers and all SCLs.

Regarding the last two bullets: Is ADEM implying that someone's "signature" can only be made through cursive writing? If an individual willingly marks a document and affirms that the mark is indeed his own, then the manner in which that mark is made and the form that mark takes are irrelevant. For the reviewer's information, the "Relinquished By" blocks on *all* of the COCs contained cursive-written signatures.

**Response to U.S. Environmental Protection Agency Comments  
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Fort McClellan, Calhoun County, Alabama**

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*Comments from Doyle T. Brittain, Senior Remedial Project Manager, dated June 4, 2003.*

***General Comments***

**Comment 1:** A review of the ecological risk sections of this document was performed and the recommendation that a remedial investigation be conducted at this site is appropriate. As with other ranges at Ft. McClellan, the issue of bullets and bullet fragments present in any areas of the site must be resolved with regard to ecological risk.

**Response 1:** Comment noted.

**Comment 2:** Figures show analytical results to 8 significant digits for the SSSL values. This is not really appropriate and makes the values difficult to read and compare. The number of significant figures should be consistent and defensible.

**Response 2:** Agree. The figures were revised accordingly.

***Specific Comments***

**Comment 1:** Figure 5-2. This figure depicts metals results exceeding ESVs and background in surface and depositional soil. Sample location HR-144Q-DEP04 has lead and selenium concentrations above their respective ESVs and background. It is possible that depositional soils located in this drainage feature downstream of this sample location may also have concentrations of these metals. In the remedial investigational phase, the potential for off-site migration of these metals via surface runoff needs to be examined.

**Response 1:** Comment noted.

**Comment 2:** Figure 5-2. This figure depicts metals results exceeding ESVs and background in surface and depositional soil. Sample location HR-144Q-GP04 has many metals which exceed ESVs. This sample location (as depicted in the figure) is located off-site. Based on the metals present in the soil at this location, the potential extent of contamination has not been fully delineated. This area should be addressed in the remedial investigation.

**Response 2:** Comment noted.

**Comment 3:** **Appendix A.** The reason for using chain of custody forms is to allow the reconstruction of the custody of the samples from time of collection until time of receipt by the analytical laboratory. This is accomplished by signatures at the appropriate location on the appropriate forms. The sampling records in this appendix will not allow for the reconstruction of the COC for the following reasons.

- On all but one of the sample collection logs (SCLs), the sampling team members printed their name, not signed as is required by the guidance. Anyone can print someone else's name.
- On the remaining SCL, the sampling team members were not identified.
- The name of the person who signed the relinquished block on all of the chain of custody (COC) forms does not appear on the sample collection logs.
- On one of the COC forms, the relinquished by block contains a printed name, not a signature.
- On four of the COC forms both the relinquished by blocks and the received by blocks contain printed names, not signatures.

**Response 3:** Disagree. The main thrust of the reviewer's comment regards chain of custody yet the first two bullets above address irregularities with the sample collection logs (SCL). Chain of custody is documented on the COC form as noted by the reviewer in the comment. While Shaw agrees that the SCLs should have been thoroughly completed as a matter of course, the irregularities therein do not invalidate the chain of custody because that is not their purpose.

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